



The Dangers of Raw Milk



Unpasteurized Milk Can Pose a Serious Health Risk

Milk and milk products provide a wealth of nutrition benefits. But raw milk, i.e., unpasteurized milk, can harbor dangerous microorganisms that can pose serious health risks to you and your family.

According to the Centers for Disease Control and Prevention (CDC), from 1993 through 2012, there were 127 outbreaks linked to raw milk or raw milk products like ice cream, soft cheese, or yogurt. They resulted in 1,909 illnesses and 144 hospitalizations. CDC points out that most foodborne illnesses are not a part of recognized outbreaks, and for every illness reported, many others occur.

Raw milk is milk from cows, sheep, and goats — or any other animal — that has not been pasteurized to kill harmful bacteria. Raw milk can carry dangerous bacteria such as *Salmonella*, *E. coli*, *Listeria*, *Campylobacter*, and others that cause foodborne illness, often called "food poisoning."

These bacteria can seriously injure the health of anyone who drinks raw milk or eats products made from raw milk. However, the bacteria in raw milk can be especially dangerous to people with weakened immune systems (such as transplant patients and individuals with HIV/AIDS, cancer, and diabetes), children, older adults, and pregnant women. In fact, CDC finds that foodborne illness from raw milk especially affects children and teenagers.

Pasteurized Milk Explained

Pasteurization is a widely used process that kills harmful bacteria by heating milk to a specific temperature for a set period of time. First developed by Louis Pasteur in 1864, pasteurization kills harmful organisms responsible for such diseases as listeriosis, typhoid fever, tuberculosis, diphtheria, Q fever, and brucellosis.

The Dangers of Listeria and Pregnancy

Pregnant women run a serious risk of becoming ill from the bacteria *Listeria*, which is often found in raw milk and can cause miscarriage, or illness, or death of the newborn baby. If you are pregnant, drinking raw milk — or eating foods made from raw milk, such as Mexican-style cheese like Queso Blanco or Queso Fresco — can harm your baby even if you don't feel sick.



Raw Milk and Serious Illness

Symptoms and Advice

Symptoms of foodborne illness usually include:

- Vomiting, diarrhea, and abdominal pain
- Flu-like symptoms such as fever, headache, and body ache

While most healthy people will recover from an illness caused by harmful bacteria in raw milk – or in foods made with raw milk – within a short time, some can develop symptoms that are chronic, severe, or even life-threatening. If you or someone you know becomes ill after consuming raw milk or products made from raw milk – or, if you are pregnant and think you may have consumed contaminated raw milk or cheese – see a healthcare professional immediately.

Raw Milk & Pasteurization: Exposing Milk Myths

While pasteurization has helped provide safe, nutrient-rich milk and cheese for over 120 years, some people continue to believe that pasteurization harms milk and that raw milk is a safe, healthier alternative.

Here are some common myths and proven facts about milk and pasteurization:

- Pasteurizing milk DOES NOT cause lactose intolerance and allergic reactions. Both raw milk and pasteurized milk can cause allergic reactions in people sensitive to milk proteins.
- Raw milk DOES NOT kill dangerous pathogens by itself.
- Pasteurization DOES NOT reduce milk's nutritional value.
- Pasteurization DOES NOT mean that it is safe to leave milk out of the refrigerator for extended time, particularly after it has been opened.
- Pasteurization DOES kill harmful bacteria.
- Pasteurization **DOES** save lives.





When in Doubt — Ask!

Taking a few moments to make sure milk is pasteurized — or that a product is not made from raw milk — can protect you or your family from serious illness.

- **Read the label.** Safe milk will have the word "pasteurized" on the label. If the word "pasteurized" does not appear on a product's label, it may contain raw milk.
- Don't hesitate to ask your grocer or health food store clerk
 whether milk or cream has been pasteurized, especially milk or milk
 products sold in refrigerated cases.
- Don't buy milk or milk products at farmers' markets or roadside stands unless you can confirm that they have been pasteurized.

F@@D FACTS



Is Your Homemade Ice Cream Safe?

Each year, homemade ice cream causes serious outbreaks of infection from *Salmonella*. The ingredient responsible is raw or undercooked eggs. If you choose to make ice cream at home, use a pasteurized egg product, egg substitute, or pasteurized shell eggs in place of the raw eggs in your favorite recipe. There are also many egg-free ice cream recipes available.

Protect Your Family with Wise Food Choices

Most milk and milk products sold commercially in the United States contain pasteurized milk or cream, or the products have been produced in a manner that kills any dangerous bacteria that may be present. But, unpasteurized milk and products made from unpasteurized milk are sold and may be harmful to your health.

To avoid getting sick from the dangerous bacteria found in raw milk, you should choose your milk and milk products carefully. Follow these guidelines:



Low Risk Choices

- Pasteurized milk or cream
- Hard cheeses such as cheddar, and extra hard grating cheeses such as Parmesan
- Soft cheeses, such as Brie, Camembert, blueveined cheeses, and Mexican-style soft cheeses such as Queso Fresco, Panela, Asadero, and Queso Blanco made from pasteurized milk
- Processed cheeses
- Cream, cottage, and Ricotta cheese made from pasteurized milk
- Yogurt made from pasteurized milk
- Pudding made from pasteurized milk
- Ice cream or frozen yogurt made from pasteurized milk

High Risk Choices

- · Unpasteurized milk or cream
- Soft cheeses, such as Brie and Camembert, and Mexican-style soft cheeses such as Queso Fresco, Panela, Asadero, and Queso Blanco made from unpasteurized milk
- Yogurt made from unpasteurized milk
- Pudding made from unpasteurized milk
- Ice cream or frozen yogurt made from unpasteurized milk



Safe Food Handling: Four Simple Steps









CLEAN

Wash hands and surfaces often

- Wash your hands with warm water and soap for at least 20 seconds before and after handling food and after using the bathroom, changing diapers, and handling pets.
- Wash your cutting boards, dishes, utensils, and counter tops with hot soapy water after preparing each food item.
- Consider using paper towels to clean up kitchen surfaces. If you use cloth towels, launder them often in the hot cycle.
- Rinse fresh fruits and vegetables under running tap water, including those with skins and rinds that are not eaten. Scrub firm produce with a clean produce brush.
- With canned goods, remember to clean lids before opening.

COOK

Cook to the right temperature

- Color and texture are unreliable indicators of safety. Using a food thermometer is the only way to ensure the safety of meat, poultry, seafood, and egg products for all cooking methods. These foods must be cooked to a safe minimum internal temperature to destroy any harmful bacteria.
- Cook eggs until the yolk and white are firm. Only use recipes in which eggs are cooked or heated thoroughly.
- When cooking in a microwave oven, cover food, stir, and rotate for even cooking. If there is no turntable, rotate the dish by hand once or twice during cooking. Always allow standing time, which completes the cooking, before checking the internal temperature with a food thermometer.
- Bring sauces, soups and gravy to a boil when reheating.

SEPARATE

Separate raw meats from other foods

- Separate raw meat, poultry, seafood, and eggs from other foods in your grocery shopping cart, grocery bags, and refrigerator.
- Use one cutting board for fresh produce and a separate one for raw meat, poultry, and seafood.
- ♦ Never place cooked food on a plate that previously held raw meat, poultry, seafood, or eggs unless the plate has been washed in hot, soapy water.
- ◆ Don't reuse marinades used on raw foods unless you bring them to a boil first.

CHILL

Refrigerate foods promptly

- Use an appliance thermometer to be sure the temperature is consistently 40° F or below and the freezer temperature is 0° F or below.
- Refrigerate or freeze meat, poultry, eggs, seafood, and other perishables within 2 hours of cooking or purchasing. Refrigerate within 1 hour if the temperature is above 90° F.
- Never thaw food at room temperature, such as on the counter top. There are three safe ways to defrost food: in the refrigerator, in cold water, and in the microwave. Food thawed in cold water or in the microwave should be cooked immediately.
- Always marinate food in the refrigerator.
- Divide large amounts of leftovers into shallow containers for quicker cooling in the refrigerator.

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